

CAS ONLINE PRINTOUT

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(FILE 'REGISTRY' ENTERED AT 06:45:36 ON 08 MAY 2007)

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L1 STRUCTURE UPLOADED

L2 0 S L1

L3 2 S L1 FUL

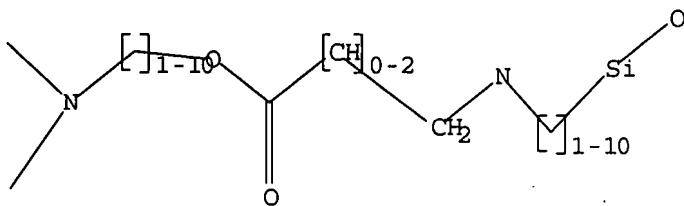
FILE 'CAPLUS' ENTERED AT 06:48:28 ON 08 MAY 2007

L4 5 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-5

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:97739 CAPLUS

DN 144:174275

TI Hydrogen oxidation catalyst and fuel cell electrode

IN Nishikiori, Hidetaka

PA Toyota Motor Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006026605	A	20060202	JP 2004-213104	20040721
PRAI	JP 2004-213104		20040721		

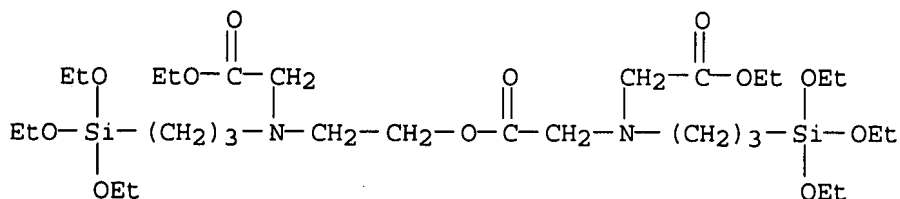
AB The invention refers to a hydrogen oxidation catalyst for fuel cell electrodes comprising a μ -oxo-transition metal complex supported on the surface of a conductive support via a ligand, wherein a hydrophobic base containing C6-10 is placed bear the μ -oxo-transition metal complex. The conductive support surface may be treated with hydrophilic treatment.

IT 478688-20-9

RL: CAT (Catalyst use); DEV (Device component use); USES (Uses)
(hydrogen oxidation catalyst and fuel cell electrode)

RN 478688-20-9 CAPLUS

CN 3,11-Dioxa-8,14-diaza-4-silahexadecan-16-oic acid, 4,4-diethoxy-8-(2-ethoxy-2-oxoethyl)-10-oxo-14-[3-(triethoxysilyl)propyl]-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:857608 CAPLUS
 DN 141:332318
 TI Nitrogen-containing organosilicon compounds with tertiary amine and carbonyl groups, process for their manufacture, and treating surfaces with them
 IN Iwai, Makoto; Hamada, Mitsuyoshi
 PA Dow Corning Toray Silicone Co., Ltd., Japan
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004087719	A1	20041014	WO 2004-JP4562	20040330
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004300047	A	20041028	JP 2003-93337	20030331
	EP 1611140	A1	20060104	EP 2004-724436	20040330
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	CN 1768067	A	20060503	CN 2004-80008693	20040330
	US 2006287546	A1	20061221	US 2006-551528	20060824
PRAI	JP 2003-93337	A	20030331		
	WO 2004-JP4562	W	20040330		

OS CASREACT 141:332318; MARPAT 141:332318

AB N-containing organosilicon compds. containing tertiary amine groups and carbonyl

groups R1R2N(R3)mCOCHR7CH2(NR4R8)ySiR5x(OR6)3-x (R1, R2, R5 = univalent C1-15 hydrocarbyl; R3 = bivalent C1-15 hydrocarbyl, -CnH2nO- where n = 1-15; R4 = bivalent C1-15 hydrocarbyl; R6 = univalent C1-15 hydrocarbyl, alkoxyalkyl; R7 = H, alkyl; R8 = H, C1-20 alkyl, aryl; m = 0, 1; x = 0-2; y = 1-5) or R9(R3)mCOCHR7CH2(NR4R8)ySiR5x(OR6)3-x (same R3-R8; R9 = alicyclic amino, heterocyclic amino group containing 1-4 N, 3-17 C, 0-2 O, 4-24 H; same m, x, y), useful for preparing silane coupling agents, are claimed, as is their preparation by reaction of the corresponding R1R2N(R3)mCOCHR7:CH2 (same R1-R3, R7) or R9(R3)mCOCHR7:CH2 (same R3, R7, R9) with H(NR4R8)ySiR5x(OR6)3-x (same R4-R6, R8). Also claimed are methods for treating surfaces by applying these N-containing organosilicon compds. or a solution containing these compds. to the surfaces. Thus, immersing glass plates in an EtOH-H2O solution of Me2NCOCH2CH2NH(CH2)3Si(OMe)3 (preparation

applicant's work

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given), drying 1 h at 120°, and subsequently treating with a curable epoxy resin composition and drying 90 min at 170° gave adhesion of the cured epoxy resin of 157 kgf/cm² adhesive force, in contrast to 130 kgf/cm² when secondary amine PhNH(CH₂)₃Si(OMe)₃ was used as the coupling agent.

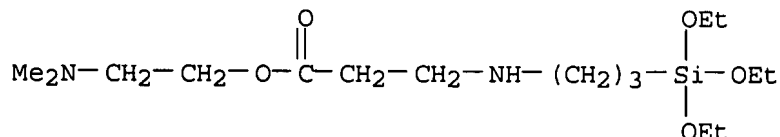
IT 773072-47-2P

RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of nitrogen-containing organosilicon compds. with tertiary amine and carbonyl groups for treating surfaces as coupling agents for curable epoxy resins)

RN 773072-47-2 CAPLUS

CN β-Alanine, N-[3-(triethoxysilyl)propyl]-, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:353873 CAPLUS

DN 138:356246

TI Methane fuel cell

IN Yamashita, Nobuhiko; Yoshikawa, Masaaki; Machino, Fumikazu

PA Osaka Gas Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003132930	A	20030509	JP 2001-329853	20011026
PRAI	JP 2001-329853		20011026		

AB The fuel cell has a 1st oxidizing means containing a CH₄ oxidizing catalyst and a CH₄ oxidizing electrode to produce MeOH from CH₄, a 2nd means capable of producing CO₂ and electrons by catalytic oxidation of MeOH, and a means supplying MeOH from the 1st oxidizing means to the 2nd means; where the CH₄ oxidizing catalyst and/or the MeOH oxidizing catalyst is a biomimetic complex.

IT 478688-20-9D, complexes with tetraethylammonium(μ-oxo)bis[trichloroferrate(III)]

RL: CAT (Catalyst use); USES (Uses)

(methane and/or methanol oxidizing biomimetic complex catalysts for methane fuel cells)

RN 478688-20-9 CAPLUS

CN 3,11-Dioxa-8,14-diaza-4-silahexadecan-16-oic acid, 4,4-diethoxy-8-(2-ethoxy-2-oxoethyl)-10-oxo-14-[3-(triethoxysilyl)propyl]-, ethyl ester (9CI) (CA INDEX NAME)



	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003053192	A	20030225	JP 2001-245576	20010813
PRAI	JP 2001-245576		20010813		

IT 478688-20-9P
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(ligand; electrochem. synthesis of alkanol directly from alkane by biomimetic catalyst supported electrode)

$$\begin{array}{ccccccc} \text{EtO} & & \text{O} & & \text{O} & & \text{OEt} \\ | & & || & & || & & | \\ \text{EtO}-\text{Si} & -(\text{CH}_2)_3- & \text{N}-\text{CH}_2 & -\text{CH}_2- & \text{O}-\text{C}- & \text{CH}_2- & \text{N}- & (\text{CH}_2)_3- & \text{Si}-\text{OEt} \\ | & & & & & & & & | \\ \text{OEt} & & & & & & & & \text{OEt} \end{array}$$

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2002:960279 CAPLUS
DN 138:41004
TI Composites of catalyst supports and metal complexes, alkane oxidation
catalysts, and preparation of alkanols
IN Shinto, Norifumi; Yamashita, Nobuhiko; Yoshikawa, Masaaki; Miki, Keishi;
Yadzu, Kazumasa; Girerd, Jean Jacques; Banse, Frederic; Raffard, Nathalie;
Blandine, Genevieve

CAS ONLINE PRINTOUT

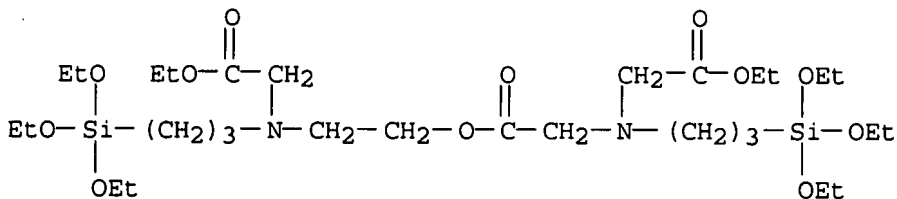
PA Osaka Gas Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002363188	A	20021218	JP 2001-165520	20010531
PRAI	JP 2001-165520		20010531		

AB The oxidation catalysts contain composites of catalyst supports and metal complexes, wherein ≥ 1 ligand of the complexes is bonded with the supports, and the complexes are positioned at the hydrophobic parts of the catalysts. Thus, silica was treated with $(\text{EtO})_3\text{SiCH}_2\text{CH}_2\text{CH}_2\text{N}(\text{CH}_2\text{CO}_2\text{Et})\text{CH}_2\text{CH}_2\text{COCH}_2\text{N}(\text{CH}_2\text{CO}_2\text{Et})\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OEt})_3$ and $(\text{EtO})_3\text{SiC}_{12}\text{H}_{25}$ resp., hydrolyzed, and treated with tetraethylammonium(μ -oxo)bis[trichloroferrate(III)] to prepare a catalyst. The catalyst was used in oxidation of methane giving 0.71 mol of methanol per mol of active catalyst site.

IT 478688-20-9P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (ligand precursors for supported iron complex catalysts for oxidation of methane to methanol)

RN 478688-20-9 CAPLUS
 CN 3,11-Dioxa-8,14-diaza-4-silahexadecan-16-oic acid, 4,4-diethoxy-8-(2-ethoxy-2-oxoethyl)-10-oxo-14-[3-(triethoxysilyl)propyl]-, ethyl ester
 (9CI) (CA INDEX NAME)



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CAS ONLINE PRINTOUT

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(FILE 'HOME' ENTERED AT 06:33:18 ON 08 MAY 2007)

FILE 'REGISTRY' ENTERED AT 06:33:23 ON 08 MAY 2007

L1 STRUCTURE UPLOADED

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L3 37 S L1 FUL

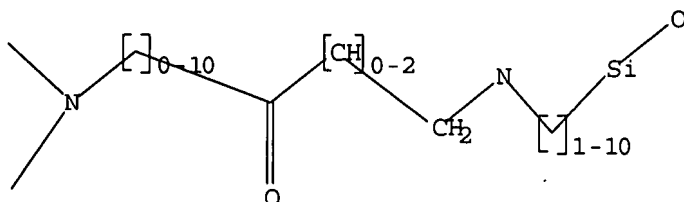
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L4 10 S L3

=> d l1

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> d bib abs hitstr 1-10

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:904063 CAPLUS

DN 141:380776

TI Epoxy resin composition containing aminosilane for electronic device packaging and electronic parts packaged by the composition

IN Hamada, Mitsuyoshi; Katayori, Mitsuo; Tendo, Kazuyoshi

PA Hitachi Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2004300275	A	20041028	JP 2003-94484	20030331
PRAI	JP 2003-94484		20030331		

OS MARPAT 141:380776

AB The composition contains an epoxy resin, a crosslinking agent, a silane substituted with secondary amino groups and tertiary amino groups on the backbone, and an inorg. filler. The electronic parts are those packaged by the composition, which shows good flowability without affecting curability and good solder reflow resistance. Thus, reacting of 156.7 g γ -aminopropyltriethoxysilane and 77.2 g N,N-dimethylacrylamide gave $\text{Me}_2\text{NC}(\text{O})(\text{CH}_2)_2\text{NH}(\text{CH}_2)_3\text{Si}(\text{OEt})_3$, 10.0 parts of which was mixed with cresol novolak epoxy resin (ESCN 190) 85.0, brominated bisphenol A epoxy resin 15.0, a biphenylene phenolic resin (MEH-7851) 92.5, PPh₃ p-benzoquinone betaine 3.5, Sb₂O₃ 6.0, carnauba wax 2.0, carbon black 1.5, and fused silica 1580 parts and transfer-molded on semiconductor elements to give test pieces showing good solder reflow resistance.

IT 773072-44-9DP, polymer with (brominated) epoxy resin and phenolic resin 780773-32-2P 780773-33-3P 780773-34-4P

CAS ONLINE PRINTOUT

780773-35-5P 780773-36-6P 780773-37-7P

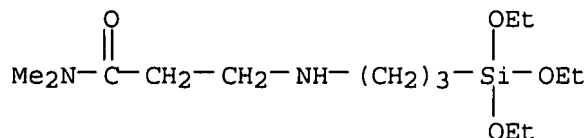
780773-38-8P 780773-40-2P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(epoxy resin composition containing aminosilane for electronic device packaging)

RN 773072-44-9 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]- (9CI) (CA INDEX NAME)



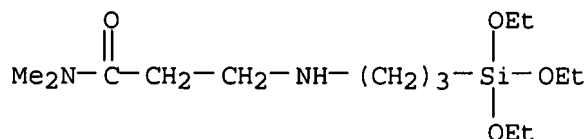
RN 780773-32-2 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with MEH 7851 and 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9

CMF C14 H32 N2 O4 Si



CM 2

CRN 193830-69-2

CMF Unspecified

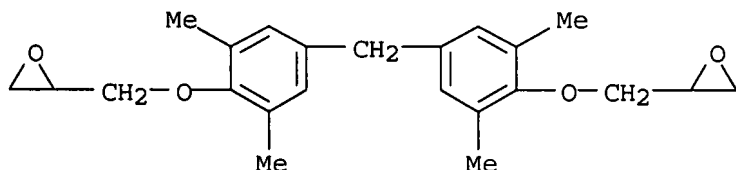
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 93705-66-9

CMF C23 H28 O4



RN 780773-33-3 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer

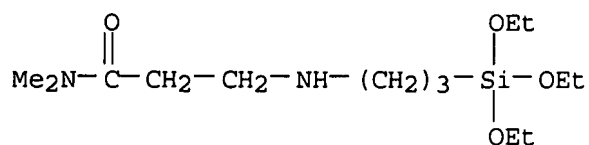
CAS ONLINE PRINTOUT

with MEH 7851, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane] and trimethoxy[3-(oxiranylmethoxy)propyl]silane (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9

CMF C14 H32 N2 O4 Si



CM 2

CRN 193830-69-2

CMF Unspecified

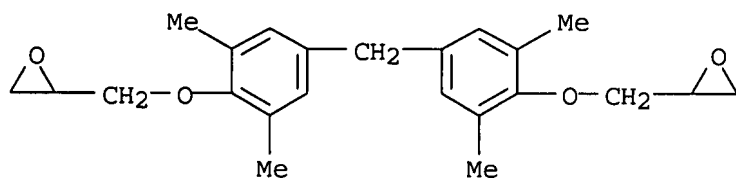
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*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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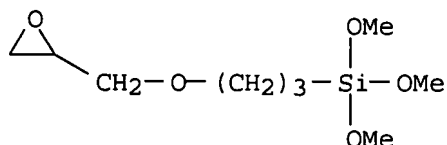
CMF C23 H28 O4



CM 4

CRN 2530-83-8

CMF C9 H20 O5 Si



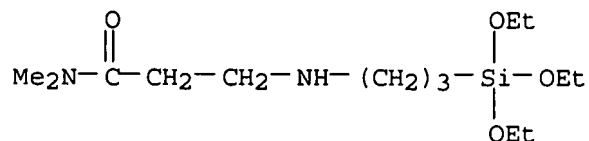
RN 780773-34-4 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with MEH 7851, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane] and N-[3-(trimethoxysilyl)propyl]benzenamine (9CI) (CA INDEX NAME)

CM 1

CAS ONLINE PRINTOUT

CRN 773072-44-9
CMF C14 H32 N2 O4 Si



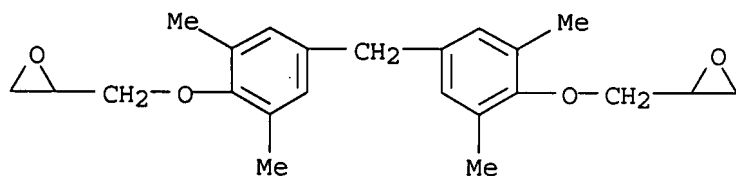
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CRN 193830-69-2
CMF Unspecified
CCI PMS, MAN

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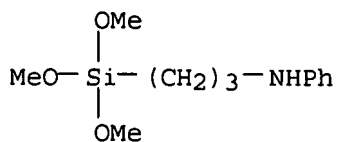
CM 3

CRN 93705-66-9
CMF C23 H28 O4



CM 4

CRN 3068-76-6
CMF C12 H21 N O3 Si

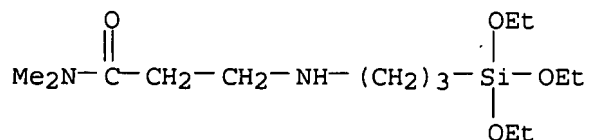


RN 780773-35-5 CAPLUS
CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with MEH 7851, 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane] and trimethoxyphenylsilane (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9
CMF C14 H32 N2 O4 Si

CAS ONLINE PRINTOUT



CM 2

CRN 193830-69-2

CMF Unspecified

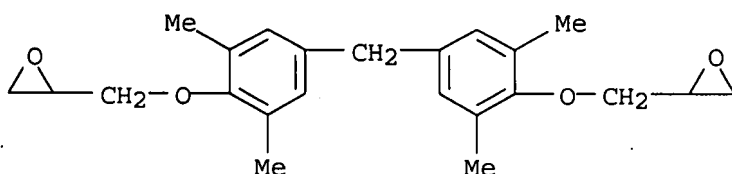
CCI PMS, MAN

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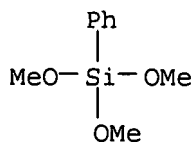
CMF C23 H28 O4



CM 4

CRN 2996-92-1

CMF C9 H14 O3 Si



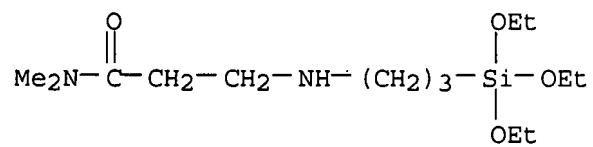
RN 780773-36-6 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with 2-hydroxybenzaldehyde, MEH 7851, 2,2'-[methylenedibis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane], phenol and 2,2'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis(oxymethylene)]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9

CMF C14 H32 N2 O4 Si



CM 2

CRN 193830-69-2

CMF Unspecified

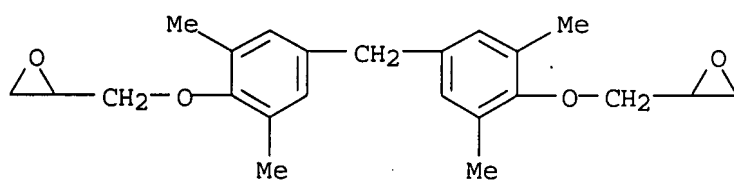
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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CRN 93705-66-9

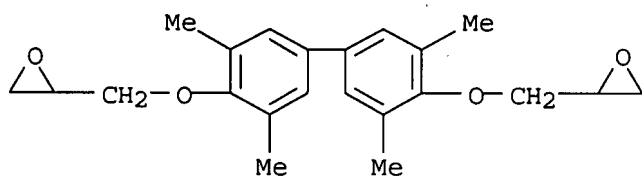
CMF C23 H28 O4



CM 4

CRN 85954-11-6

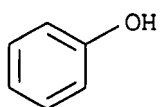
CMF C22 H26 O4



CM 5

CRN 108-95-2

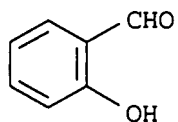
CMF C6 H6 O



CM 6

CAS ONLINE PRINTOUT

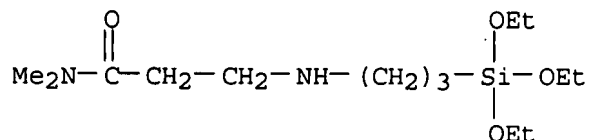
CRN 90-02-8
CMF C7 H6 O2



RN 780773-37-7 CAPLUS
CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with HE 510 and 2,2'-[methylenebis[(2,6-dimethyl-4,1-phenylene)oxymethylene]]bis[oxirane] (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9
CMF C14 H32 N2 O4 Si



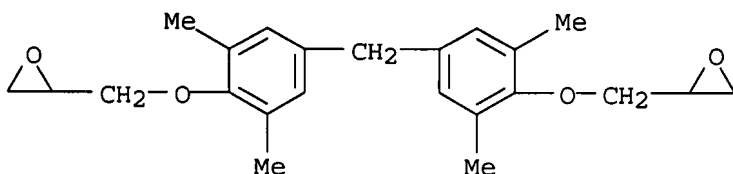
CM 2

CRN 263356-53-2
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 93705-66-9
CMF C23 H28 O4

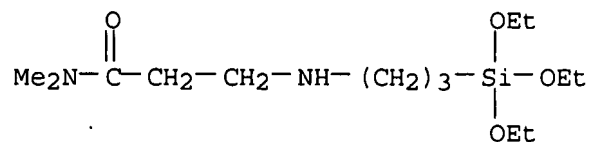


RN 780773-38-8 CAPLUS
CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer with CER 3000L and MEH 7851 (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9
CMF C14 H32 N2 O4 Si

CAS ONLINE PRINTOUT



CM 2

CRN 521304-40-5
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

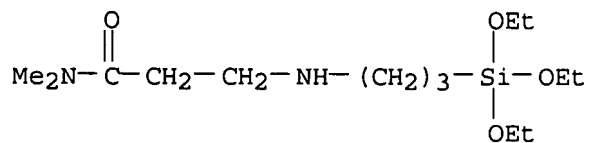
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CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 780773-40-2 CAPLUS
CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]-, polymer
with CER 3000L and SN 170 (9CI) (CA INDEX NAME)

CM 1

CRN 773072-44-9
CMF C14 H32 N2 O4 Si



CM 2

CRN 521304-40-5
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

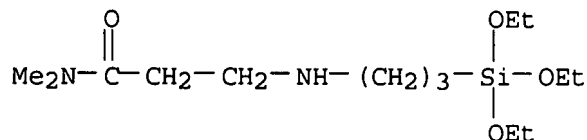
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CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 773072-44-9P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(monomer; epoxy resin composition containing aminosilane for electronic
device

CAS ONLINE PRINTOUT

packaging)
 RN 773072-44-9 CAPLUS
 CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:857608 CAPLUS
 DN 141:332318
 TI Nitrogen-containing organosilicon compounds with tertiary amine and carbonyl groups, process for their manufacture, and treating surfaces with them
 IN Iwai, Makoto; Hamada, Mitsuyoshi
 PA Dow Corning Toray Silicone Co., Ltd., Japan
 SO PCT Int. Appl., 23 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004087719	A1	20041014	WO 2004-JP4562	20040330
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004300047	A	20041028	JP 2003-93337	20030331
	EP 1611140	A1	20060104	EP 2004-724436	20040330
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
	CN 1768067	A	20060503	CN 2004-80008693	20040330
	US 2006287546	A1	20061221	US 2006-551528	20060824
PRAI	JP 2003-93337	A	20030331		
	WO 2004-JP4562	W	20040330		

OS CASREACT 141:332318; MARPAT 141:332318

AB N-containing organosilicon compds. containing tertiary amine groups and carbonyl

groups R1R2N(R3)mCOCHR7CH2(NR4R8)ySiR5x(OR6)3-x (R1, R2, R5 = univalent C1-15 hydrocarbyl; R3 = bivalent C1-15 hydrocarbyl, -CnH2nO- where n = 1-15; R4 = bivalent C1-15 hydrocarbyl; R6 = univalent C1-15 hydrocarbyl, alkoxyalkyl; R7 = H, alkyl; R8 = H, C1-20 alkyl, aryl; m = 0, 1; x = 0-2; y = 1-5) or R9(R3)mCOCHR7CH2(NR4R8)ySiR5x(OR6)3-x (same R3-R8; R9 = alicyclic amino, heterocyclic amino group containing 1-4 N, 3-17 C, 0-2 O, 4-24 H; same m, x, y), useful for preparing silane coupling agents, are claimed, as is their preparation by reaction of the corresponding R1R2N(R3)mCOCR7:CH2 (same R1-R3, R7) or R9(R3)mCOCR7:CH2 (same R3, R7, R9)

Applicant's work

with $\text{H}(\text{NR}_4\text{R}_8)_y\text{SiR}_5\text{x}(\text{OR}_6)_3\text{-x}$ (same $\text{R}_4\text{-R}_6$, R_8). Also claimed are methods for treating surfaces by applying these N-containing organosilicon compds. or a solution containing these compds. to the surfaces. Thus, immersing glass plates in an EtOH-H₂O solution of $\text{Me}_2\text{NCOCH}_2\text{CH}_2\text{NH}(\text{CH}_2)_3\text{Si}(\text{OMe})_3$ (preparation given), drying 1 h at 120°, and subsequently treating with a curable epoxy resin composition and drying 90 min at 170° gave adhesion of the cured epoxy resin of 157 kgf/cm² adhesive force, in contrast to 130 kgf/cm² when secondary amine $\text{PhNH}(\text{CH}_2)_3\text{Si}(\text{OMe})_3$ was used as the coupling agent.

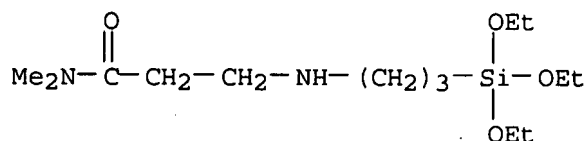
IT 773072-44-9P 773072-45-0P

RL: RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of nitrogen-containing organosilicon compds. with tertiary amine and carbonyl groups for treating surfaces as coupling agents for curable epoxy resins)

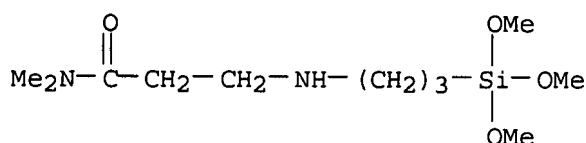
RN 773072-44-9 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(triethoxysilyl)propyl]amino]- (9CI) (CA INDEX NAME)



RN 773072-45-0 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-(trimethoxysilyl)propyl]amino]- (9CI) (CA INDEX NAME)



RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2002:97751 CAPLUS

DN 137:46962

TI Dendritic chiral auxiliaries on silica: a new heterogeneous catalyst for enantioselective addition of diethylzinc to benzaldehyde

AU Chung, Young-Min; Rhee, Hyun-Ku

CS School of Chemical Engineering and Institute of Chemical Processes, Seoul National University, Kwanak-ku, Seoul, 151-742, S. Korea

SO Chemical Communications (Cambridge, United Kingdom) (2002), (3), 238-239
CODEN: CHCOFS; ISSN: 1359-7345

PB Royal Society of Chemistry

DT Journal

LA English

OS CASREACT 137:46962

AB (1R,2S)-Ephedrine attached to silica supported dendrimers were used as chiral auxiliaries for the enantioselective addition of diethylzinc to benzaldehyde. The control of dendrimer propagation on the silica surface

CAS ONLINE PRINTOUT

is of prime importance to obtain enhanced conversion, selectivity, and enantioselectivity.

IT 438546-68-0DP, silica-supported

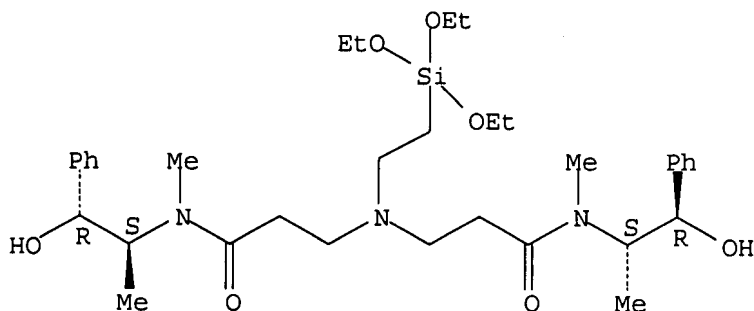
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(ephedrine attached to silica-supported dendrimer as catalysts for the stereoselective addition of diethylzinc to benzaldehyde)

RN 438546-68-0 CAPLUS

CN Propanamide, 3,3'-[[2-(triethoxysilyl)ethyl]imino]bis[N-[(1S,2R)-2-hydroxy-1-methyl-2-phenylethyl]-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:17700 CAPLUS

DN 134:105904

TI Vinyl monomers, polymers containing them, and contact lenses comprising the polymers

IN Nakamura, Masataka; Yokota, Mitsuru

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001000530	A	20010109	JP 1999-176503	19990623
PRAI	JP 1999-176503		19990623		
OS	MARPAT 134:105904				

AB R2XCH2CHR1CO2(CH2)nCH:CH2 [I; X = NY, O, S; Y = H, (un)substituted C1-20 alkyl, (ub)substituted C6-20 aryl; R1 = H, Me; R2 = any group given for Y; if X = NY, then Y and R2 may be bonded together to form a N-containing ring; n = 0, 1], polymers containing I, and contact lenses comprising the polymers are claimed. I are polymerized with hydrophilic N-vinylpyrrolidone to give polymers with high transparency, high O permeability, and good wettability. A composition containing (Me3SiO)3Si(CH2)3N(CH2CH2CO2Me)CH2CH2CO2CH:C H2 (preparation given), N-vinylpyrrolidone, divinyl adipate, Darocur 1173, and Perbutyl O was irradiated with light in a mold to give a transparent contact lens.

IT 318467-75-3P

RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

CAS ONLINE PRINTOUT

(preparation of vinyl monomers and polymers therefrom for contact lenses with high transparency, O permeability, and wettability)

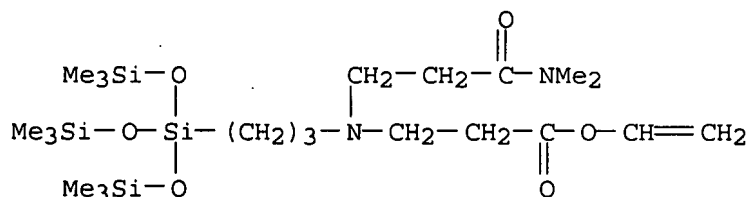
RN 318467-75-3 CAPLUS

CN β -Alanine, N-[3-(dimethylamino)-3-oxopropyl]-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]-, ethenyl ester, polymer with diethenyl hexanedioate and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 318467-73-1

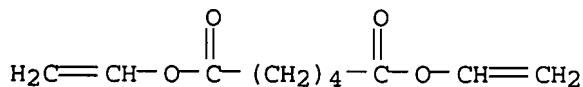
CMF C22 H50 N2 O6 Si4



CM 2

CRN 4074-90-2

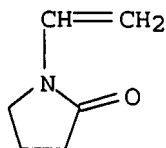
CMF C10 H14 O4



CM 3

CRN 88-12-0

CMF C6 H9 N O



IT 212374-56-6P 318467-73-1P

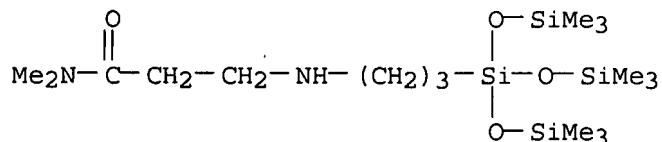
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);

RACT (Reactant or reagent)

(preparation of vinyl monomers and polymers therefrom for contact lenses with high transparency, O permeability, and wettability)

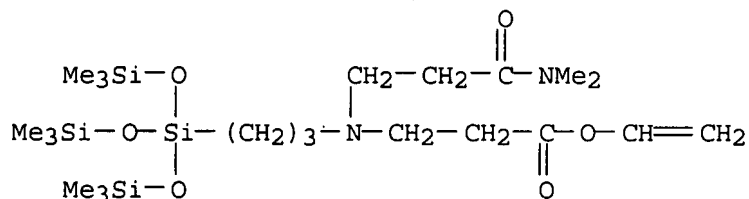
RN 212374-56-6 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]- (9CI) (CA INDEX NAME)



RN 318467-73-1 CAPLUS

CN β -Alanine, N-[3-(dimethylamino)-3-oxopropyl]-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]-, ethenyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:529475 CAPLUS

DN 133:140304

TI Carbonylaminomethylstyrene monomers, their polymers, and moldings having high transparency, oxygen permeability, and hydrophilicity for contact lenses

IN Nakamura, Masataka; Yokota, Mitsuru

PA Toray Industries, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000212154	A	20000802	JP 1999-17585	19990126
PRAI	JP 1999-17585		19990126		

AB H2C:CR1C6H4CR2R3NHCOXR4 [R1 = H, Me; R2, R3 = H, (un)substituted alkyl, (un)substituted aryl; X = NY1, O, S; Y1 = H, (un)substituted alkyl, (un)substituted aryl; R4 = H, (un)substituted alkyl, (un)substituted aryl; R4Y1 may form N-containing ring] are manufactured

H2C:CMcO2CH2CH(OH)CH2N(CH2CH2CO 2Me)(CH2)3Si(OSiMe3)3 60, m-H2C:CMcC6H4CMe2NHCONEt2 (preparation given) 10, N,N-dimethylacrylamide 30, triethylene glycol dimethacrylate 1 part were polymerized and cast between glass plate to give a film showing tensile strength 22.1 gk/cm2.

IT 286856-46-0P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(carbonylaminomethylstyrene monomers, their polymers, and moldings having high transparency, oxygen permeability, and hydrophilicity for contact lenses)

RN 286856-46-0 CAPLUS

CN β -Alanine, N-[2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]-, methyl ester, polymer with N,N-dimethyl-3-[[[1-methyl-1-[4-(1-methylethenyl)phenyl]ethyl]amino]carbonyl][3-[3,3,3-trimethyl-1,1-

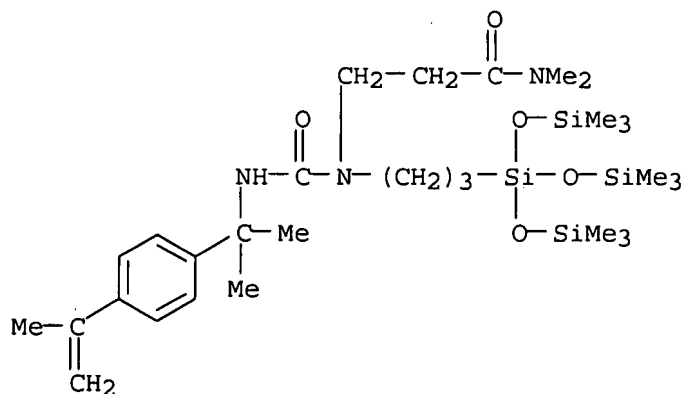
CAS ONLINE PRINTOUT

bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]propanamide,
N,N-dimethyl-2-propenamide and 1,2-ethanediylbis(oxy-2,1-ethanediyl)
bis(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 286856-35-7

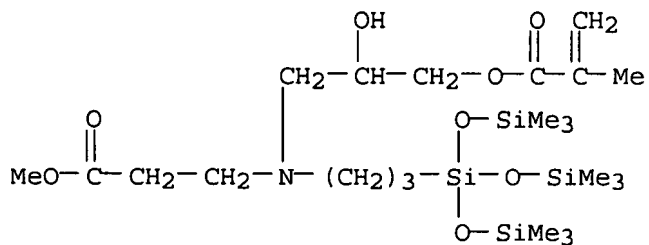
CMF C30 H59 N3 O5 Si4



CM 2

CRN 250780-41-7

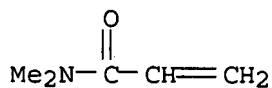
CMF C23 H51 N O8 Si4



CM 3

CRN 2680-03-7

CMF C5 H9 N O



CM 4

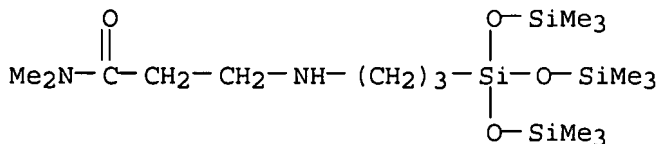
CRN 109-16-0

CMF C14 H22 O6

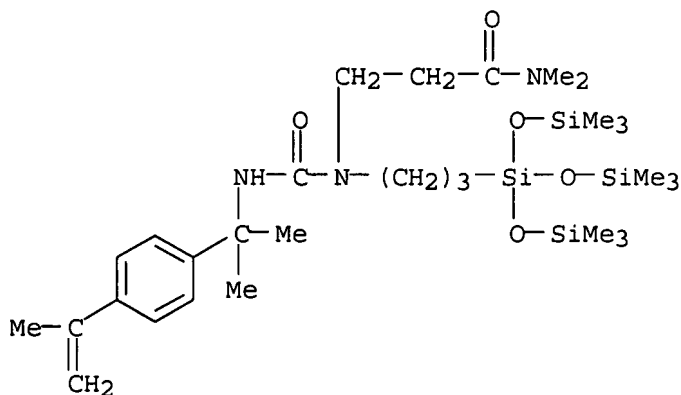
IT 212374-56-6P 286856-35-7P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(carbonylaminomethylstyrene monomers, their polymers, and moldings
having high transparency, oxygen permeability, and hydrophilicity for
contact lenses)

RN 212374-56-6 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-[3,3,3-trimethyl-1,1-
bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino] - (9CI) (CA INDEX NAME)



RN 286856-35-7 CAPLUS
CN Propanamide, N,N-dimethyl-3-[[[1-methyl-1-[4-(1-methylethenyl)phenyl]ethyl]amino]carbonyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-(9CI) (CA INDEX NAME)

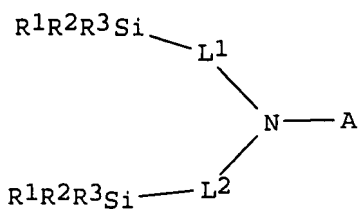


L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:260294 CAPLUS
DN 132:279348
TI Functionalized silicon compounds, their synthesis and use
IN McGall, Glenn; Forman, Jonathan Eric
PA Affymetrix, Inc., USA
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CAS ONLINE PRINTOUT

PI WO 2000021967 A1 20000420 WO 1999-US23794 19991013
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 6262216 B1 20010717 US 1998-172190 19981013
 AU 9962985 A1 20000501 AU 1999-62985 19991013
 PRAI US 1998-172190 A2 19981013
 WO 1999-US23794 W 19991013
 OS CASREACT 132:279348; MARPAT 132:279348
 GI

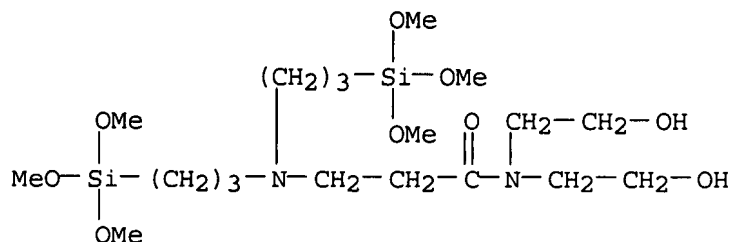


I

AB Provided are functionalized Si compds. of general formula I wherein R1 and R2 are independently selected from the group consisting of alkoxy and halide and R3 is selected from the group consisting of alkoxy, halide and alkyl; wherein L1 and L2 are both (CH2)*n*, wherein *n* = 2 to 10 and wherein A is a moiety comprising one or more derivatizable functional groups, e.g., hydroxyl, amino, amido, carboxyl, thio, halo or sulfonate, and methods for their synthesis and use. The functionalized Si compds. include at least one activated Si group and at least one derivatizable functional group. Exemplary derivatizable functional groups include hydroxyl, amino, carboxyl and thiol, as well as modified forms thereof, such as activated or protected forms. The functionalized Si compds. may be covalently attached to surfaces to form functionalized surfaces which may be used in a wide range of different applications. In one embodiment, the Si compds. are attached to the surface of a substrate comprising SiO₂, such as a glass substrate, to provide a functionalized surface on the substrate, to which mols., including polypeptides and nucleic acids, may be attached. In one embodiment, after covalent attachment of a functionalized Si compound to the surface of a solid SiO₂ substrate to form a functionalized coating on the substrate, an array of nucleic acids may be covalently attached to the substrate. Thus, the method permits the formation of high d. arrays of nucleic acids immobilized on a substrate, which may be used, for example, in conducting high volume nucleic acid hybridization assays.

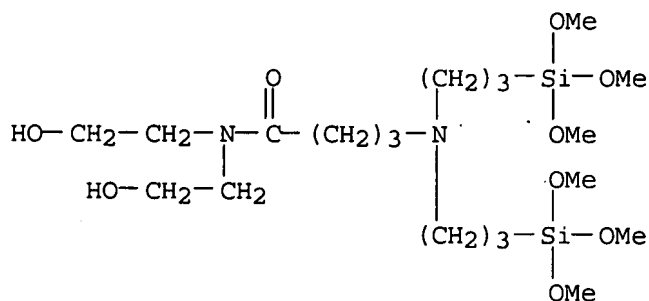
IT 264129-23-9P 264129-29-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and covalent attachment to surfaces to form functionalized surfaces to which polypeptides and nucleic acids may be attached)

RN 264129-23-9 CAPLUS
 CN Propanamide, 3-[bis[3-(trimethoxysilyl)propyl]amino]-N,N-bis(2-hydroxyethyl)-(9CI) (CA INDEX NAME)



X

RN 264129-29-5 CAPLUS
 CN Butanamide, 4-[bis[3-(trimethoxysilyl)propyl]amino]-N,N-bis(2-hydroxyethyl)-(9CI) (CA INDEX NAME)



7

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:298387 CAPLUS
 DN 131:9678
 TI Transparent siloxysilyl styrene polymer moldings having good wettability, oxygen permeability, and mechanical strength for contact lenses
 IN Saito, Nobuo; Yokota, Mitsuru
 PA Toray Industries, Inc., Japan
 SO Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 11124415	A	19990511	JP 1997-292323	19971024
PRAI	JP 1997-292323		19971024		

AB Title moldings are composed of polymers of $\text{CH}_2:\text{CHC}_6\text{H}_4(\text{CO})_i(\text{CH}_2)_j\text{NX}(\text{CH}_2)_k(\text{SiB}_2\text{O})_d\text{Si}[(\text{OSiA}_2)_a\text{A}][(\text{OSiA}_2)_b\text{B}](\text{OSiA}_2)_c\text{A}$ [X = H, (un)substituted alkyl or aryl, $(\text{CH}_2)_e\text{CO}_2\text{R}_1$, $(\text{CH}_2)_f\text{CONR}_2\text{R}_3$; R₁-R₃ = H, (un)substituted alkyl or aryl; e, f, k = 1-10; i = 0-1; j = 0-10; if X = $(\text{CH}_2)_e\text{CO}_2\text{R}_1$, $(\text{CH}_2)_f\text{CONR}_2\text{R}_3$, then i ≠ a and/or j ≠ 0; A, B = C1-5 alkyl, Ph, fluoroalkyl; a, b, c = 0-20; d = 0-200]. Thus, $\text{CH}_2:\text{CHC}_6\text{H}_4\text{CH}_2\text{N}(\text{CH}_2\text{CH}_2\text{CONMe}_2)(\text{CH}_2)_3\text{Si}[\text{OSiMe}_3]_3$ [prepared from N,N-dimethylacrylamide, 3-aminopropyltris(trimethylsiloxy)silane, and chloromethylstyrene] 60, N,N-dimethylacrylamide 40, and ethylene glycol dimethacrylate 1 part were polymerized in the presence of AIBN between glass plates to give a transparent flexible film showing breaking strength 5.0 kg/cm² and elongation at rupture 169%.

IT 212613-43-9P 212613-44-0P 212613-45-1P

CAS ONLINE PRINTOUT

RL: DEV (Device component use); IMF (Industrial manufacture); PNU (Preparation, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(transparent siloxysilyl styrene copolymer moldings having good wettability, oxygen permeability, and mech. strength for contact lenses)

RN 212613-43-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 3-[[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(ethenylphenyl)methyl]amino]-N,N-dimethylpropanamide and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

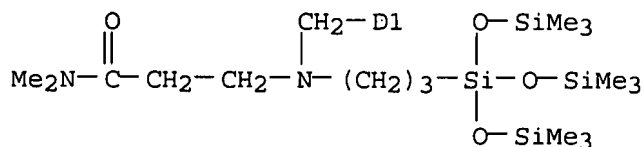
CRN 212613-42-8

CMF C26 H52 N2 O4 Si4

CCI IDS



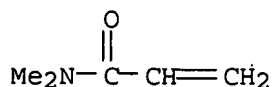
D1-CH=CH₂



CM 2

CRN 2680-03-7

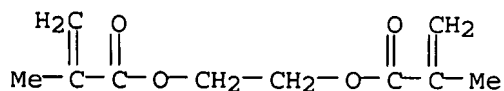
CMF C5 H9 N O



CM 3

CRN 97-90-5

CMF C10 H14 O4



RN 212613-44-0 CAPLUS

CAS ONLINE PRINTOUT

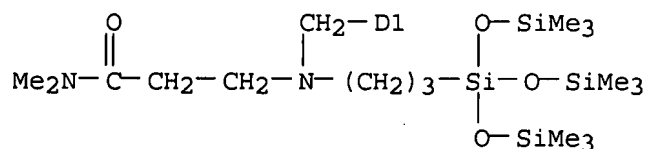
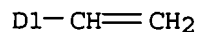
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(et
henylphenyl)methyl]amino]-N,N-dimethylpropanamide and 2-hydroxyethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 212613-42-8

CMF C26 H52 N2 O4 Si4

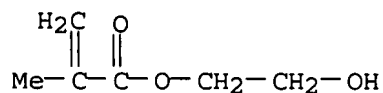
CCI IDS



CM 2

CRN 868-77-9

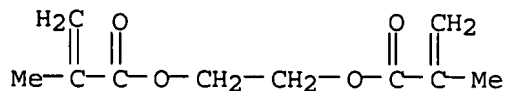
CMF C6 H10 O3



CM 3

CRN 97-90-5

CMF C10 H14 O4



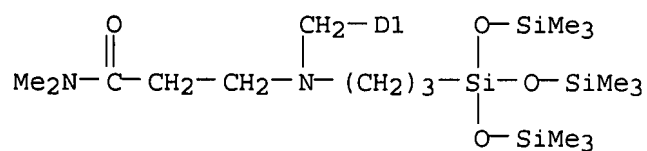
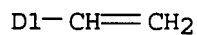
RN 212613-45-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(et
henylphenyl)methyl]amino]-N,N-dimethylpropanamide, N,N-dimethyl-2-
propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX
NAME)

CM 1

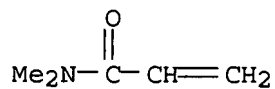
CAS ONLINE PRINTOUT

CRN 212613-42-8
 CMF C26 H52 N2 O4 Si4
 CCI IDS



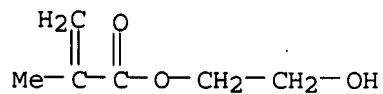
CM 2

CRN 2680-03-7
 CMF C5 H9 N O



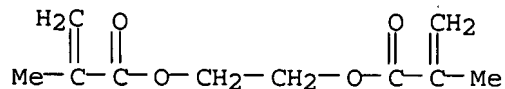
CM 3

CRN 868-77-9
 CMF C6 H10 O3



CM 4

CRN 97-90-5
 CMF C10 H14 O4



IT 212374-56-6P 212613-42-8P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT

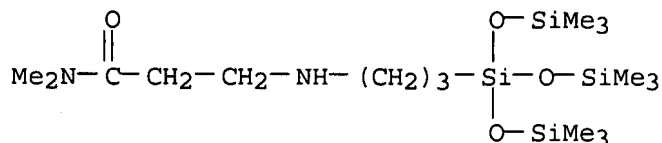
CAS ONLINE PRINTOUT

(Reactant or reagent)

(transparent siloxysilyl styrene copolymer moldings having good wettability, oxygen permeability, and mech. strength for contact lenses)

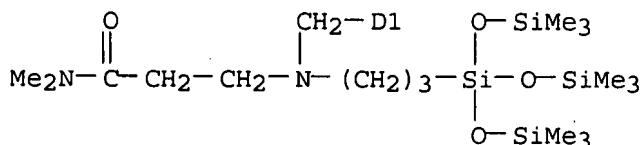
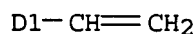
RN 212374-56-6 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]- (9CI) (CA INDEX NAME)



RN 212613-42-8 CAPLUS

CN Propanamide, 3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(ethenylphenyl)methyl]amino]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:604815 CAPLUS

DN 129:221218

TI Plastic articles for medical use

IN Yokota, Mitsuru; Saito, Nobuo

PA Toray Industries, Inc., Japan; Johnson & Johnson Vision Care, Inc.

SO Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DT Patent

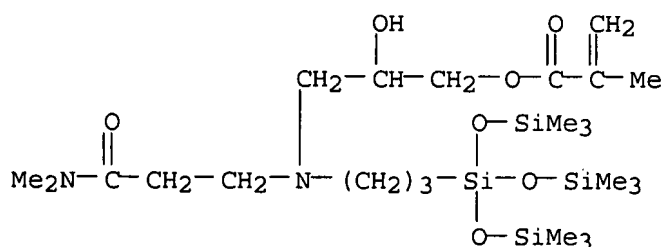
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 862068	A2	19980902	EP 1997-309882	19971208
	EP 862068	A3	19990127		
	EP 862068	B1	20050601		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 10170874	A	19980626	JP 1996-326674	19961206
	JP 10212355	A	19980811	JP 1997-18610	19970131
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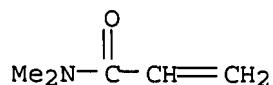
CAS ONLINE PRINTOUT

JP 11124412 A 19990511 JP 1998-154616 19980603
 JP 3855464 B2 20061213
 PRAI JP 1996-326674 A 19961206
 JP 1997-18610 A 19970131
 JP 1997-148738 A 19970606
 JP 1997-223777 A 19970820
 AB Plastic articles for medical use comprise a polymer derived from an ethylenically unsatd. monomer containing amino groups and organosiloxane groups. The polymers are excellent in transparency and gas permeability and have good mech. properties, and hence can be suitably used, e.g., contact lenses. $\text{CH}_2:\text{CMeCO}_2\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{NH}(\text{CH}_2)_3\text{Si}[\text{OSiMe}_3]_3$, N,N-dimethylacrylamide, and ethylene glycol dimethacrylate (60:40:1) were copolymd. The obtained copolymer was transparent and had a Shore D hardness value 70, Shore A hardness after hydration 15, water content 55 %, and O permeability coefficient $47 + 10^{-11} \text{ mL} \cdot \text{cm} / \text{cm}^2 \cdot \text{s} \cdot \text{cnt dot. mmHg}$.
 IT 212374-40-8P 212374-41-9P 212374-42-0P
 212374-43-1P 212374-44-2P 212374-45-3P
 212374-47-5P 212374-48-6P 212374-49-7P
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 212613-44-0P 212613-45-1P
 RL: IMF (Industrial manufacture); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of acrylic siloxanes for contact lenses)
 RN 212374-40-8 CAPLUS
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-2-hydroxypropyl 2-methyl-2-propenoate and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)
 CM 1
 CRN 212374-39-5
 CMF C24 H54 N2 O7 Si4



CM 2

CRN 2680-03-7
 CMF C5 H9 N O

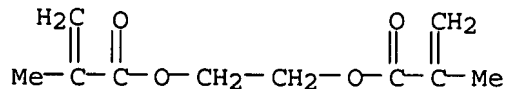


CAS ONLINE PRINTOUT

CM 3

CRN 97-90-5

CMF C10 H14 O4



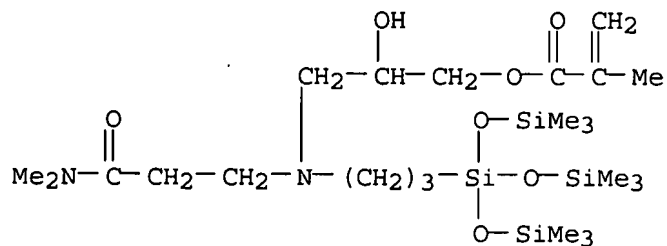
RN 212374-41-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanylpropyl]amino]-2-hydroxypropyl
 2-methyl-2-propenoate and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA
 INDEX NAME)

CM 1

CRN 212374-39-5

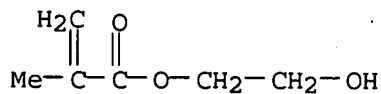
CMF C24 H54 N2 O7 Si4



CM 2

CRN 868-77-9

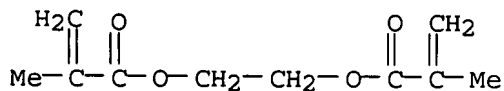
CMF C6 H10 O3



CM 3

CRN 97-90-5

CMF C10 H14 O4



RN 212374-42-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with

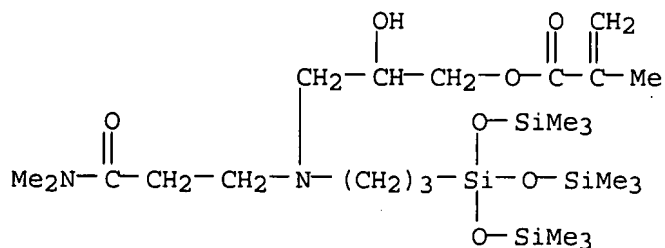
CAS ONLINE PRINTOUT

3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-2-hydroxypropyl
2-methyl-2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 212374-39-5

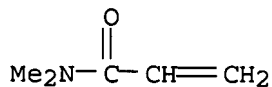
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CM 2

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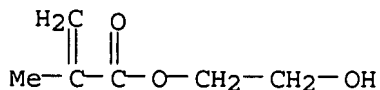
CMF C5 H9 N O



CM 3

CRN 868-77-9

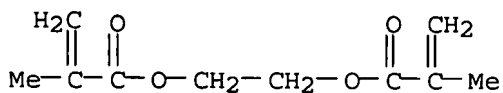
CMF C6 H10 O3



CM 4

CRN 97-90-5

CMF C10 H14 O4



RN 212374-43-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-

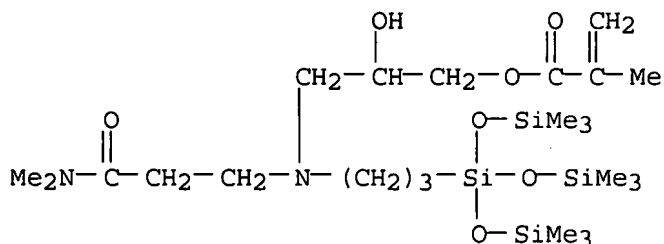
CAS ONLINE PRINTOUT

bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-2-hydroxypropyl
2-methyl-2-propenoate and 4-(1-oxo-2-propenyl)morpholine (9CI) (CA INDEX
NAME)

CM 1

CRN 212374-39-5

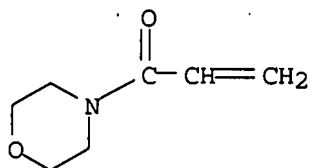
CMF C24 H54 N2 O7 Si4



CM 2

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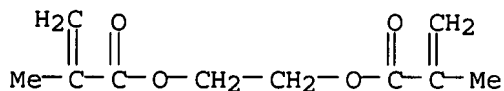
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CM 3

CRN 97-90-5

CMF C10 H14 O4



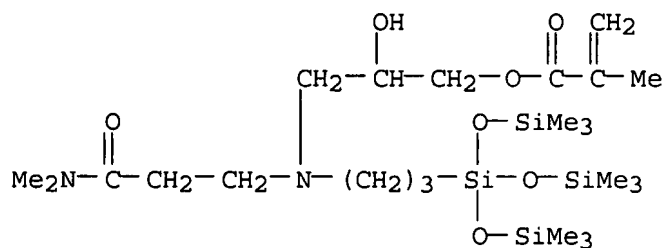
RN 212374-44-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
2-(dimethylamino)ethyl 2-propenoate and 3-[[3-(dimethylamino)-3-
oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]prop
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CM 1

CRN 212374-39-5

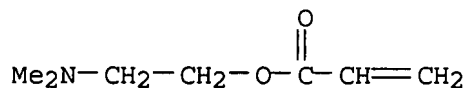
CMF C24 H54 N2 O7 Si4



CM 2

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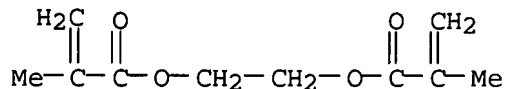
CMF C7 H13 N O2



CM 3

CRN 97-90-5

CMF C10 H14 O4



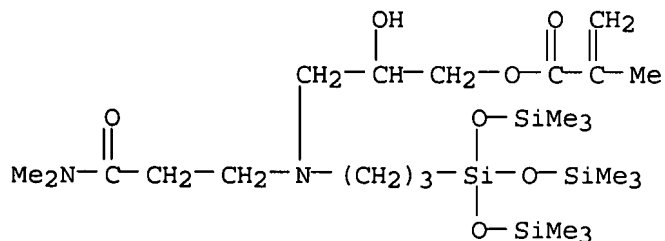
RN 212374-45-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
 3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-2-hydroxypropyl
 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and
 4-(1-oxo-2-propenyl)morpholine (9CI) (CA INDEX NAME)

CM 1

CRN 212374-39-5

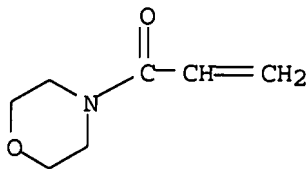
CMF C24 H54 N2 O7 Si4



CM 2

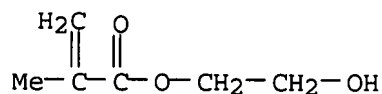
CAS ONLINE PRINTOUT

CRN 5117-12-4
CMF C7 H11 N O2



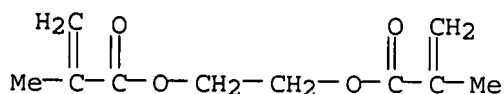
CM 3

CRN 868-77-9
CMF C6 H10 O3



CM 4

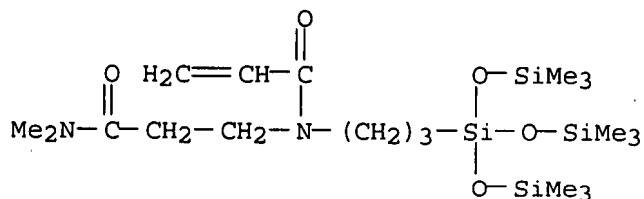
CRN 97-90-5
CMF C10 H14 O4



RN 212374-47-5 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
N-[3-(dimethylamino)-3-oxopropyl]-N-[3-[3,3,3-trimethyl-1,1-
bis[(trimethylsilyl)oxy]disiloxanyl]propyl]-2-propenamide and
N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

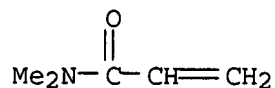
CRN 212374-46-4
CMF C20 H46 N2 O5 Si4



CM 2

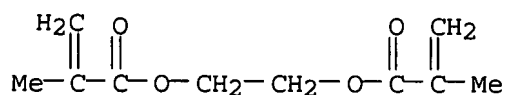
CAS ONLINE PRINTOUT

CRN 2680-03-7
CMF C5 H9 N O



CM 3

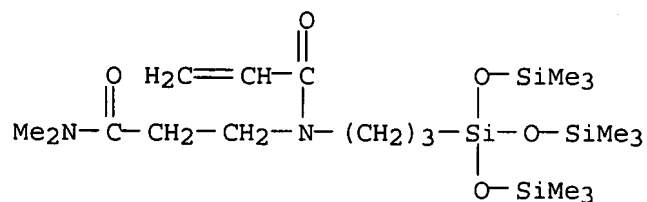
CRN 97-90-5
CMF C10 H14 O4



RN 212374-48-6 CAPLUS
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
N-[3-(dimethylamino)-3-oxopropyl]-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]-2-propenamide,
N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI)
(CA INDEX NAME)

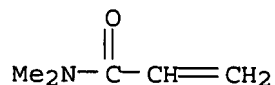
CM 1

CRN 212374-46-4
CMF C20 H46 N2 O5 Si4



CM 2

CRN 2680-03-7
CMF C5 H9 N O

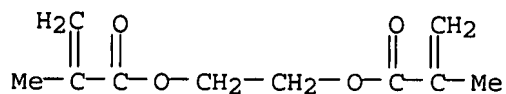


CM 3

CRN 868-77-9
CMF C6 H10 O3

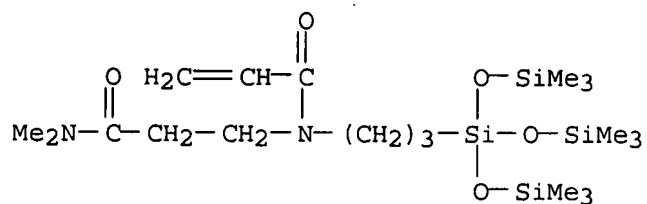
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CRN 97-90-5
CMF C10 H14 O4



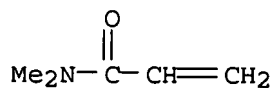
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CRN 212374-46-4
CMF C20 H46 N2 O5 Si4



CM 2

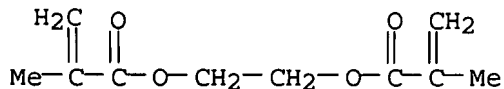
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CMF C5 H9 N O



CM 3

CRN 97-90-5
CMF C10 H14 O4

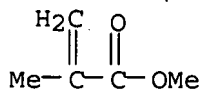
CAS ONLINE PRINTOUT



CM 4

CRN 80-62-6

CMF C5 H8 O2



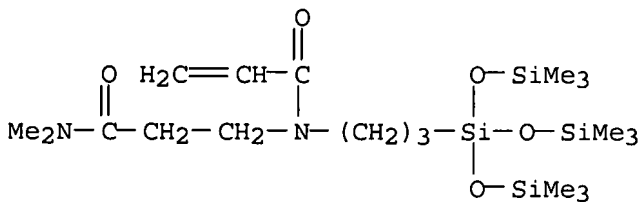
RN 212374-50-0 CAPLUS

CM 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
N-[3-(dimethylamino)-3-oxopropyl]-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanylpropyl]-2-propenamide,
N,N-dimethyl-2-propenamide and 2,2,2-trifluoroethyl 2-methyl-2-propenoate
(9CI) (CA INDEX NAME)

CM 1

CRN 212374-46-4

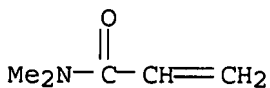
CMF C20 H46 N2 O5 Si4



CM 2

CRN 2680-03-7

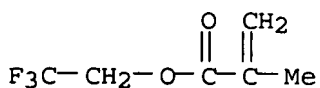
CMF C5 H9 N O



CM 3

CRN 352-87-4

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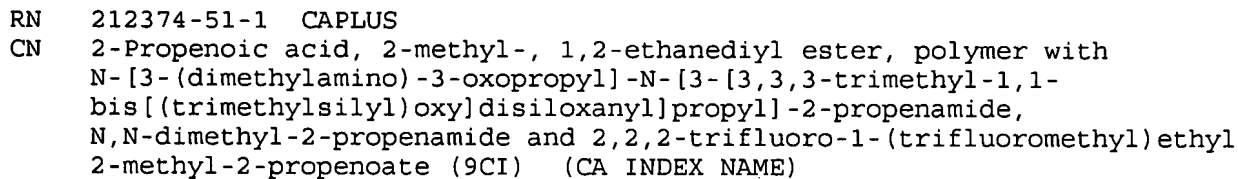


CM 4

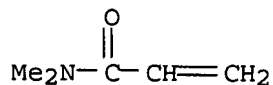
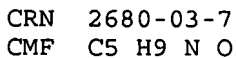
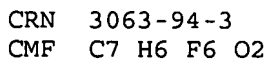
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CRN 97-90-5
CMF C10 H14 O4



CRN 212374-46-4
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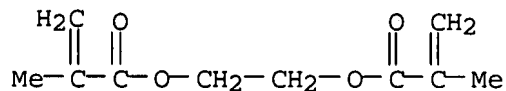


CAS ONLINE PRINTOUT

CM 4

CRN 97-90-5

CMF C10 H14 O4



RN 212613-43-9 CAPLUS

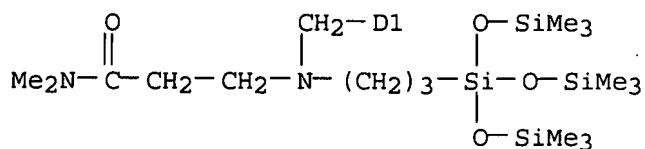
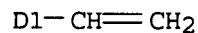
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(ethenylphenyl)methyl]amino]-N,N-dimethylpropanamide and N,N-dimethyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 212613-42-8

CMF C26 H52 N2 O4 Si4

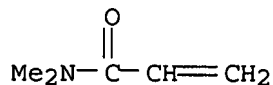
CCI IDS



CM 2

CRN 2680-03-7

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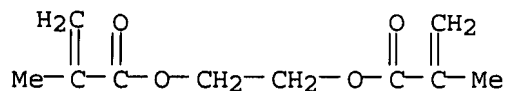


CM 3

CRN 97-90-5

CMF C10 H14 O4

CAS ONLINE PRINTOUT



RN 212613-44-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with
3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(et
henylphenyl)methyl]amino]-N,N-dimethylpropanamide and 2-hydroxyethyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

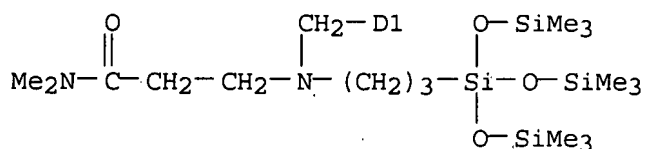
CRN 212613-42-8

CMF C26 H52 N2 O4 Si4

CCI IDS



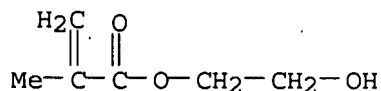
D1-CH=CH₂



CM 2

CRN 868-77-9

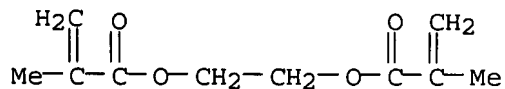
CMF C6 H10 O3



CM 3

CRN 97-90-5

CMF C10 H14 O4



RN 212613-45-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with

CAS ONLINE PRINTOUT

3-[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(ethenylphenyl)methyl]amino]-N,N-dimethylpropanamide, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

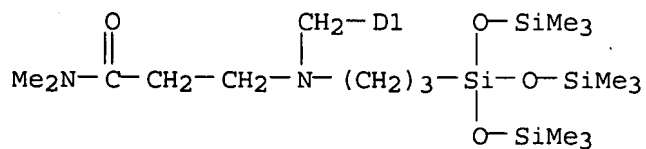
CRN 212613-42-8

CMF C26 H52 N2 O4 Si4

CCI IDS



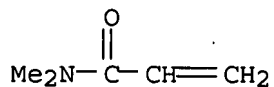
D1-CH=CH₂



CM 2

CRN 2680-03-7

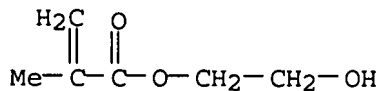
CMF C5 H9 N O



CM 3

CRN 868-77-9

CMF C6 H10 O3

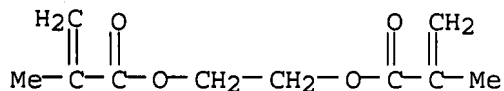


CM 4

CRN 97-90-5

CMF C10 H14 O4

CAS ONLINE PRINTOUT



IT 212374-39-5P 212374-56-6P 212374-57-7P

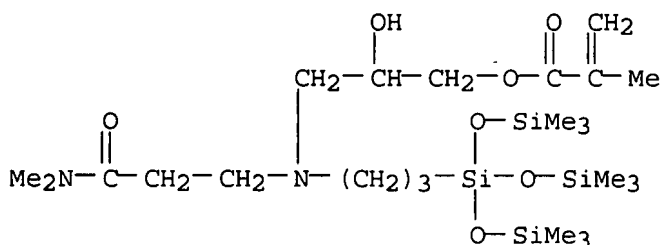
212613-42-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of acrylic siloxanes for contact lenses)

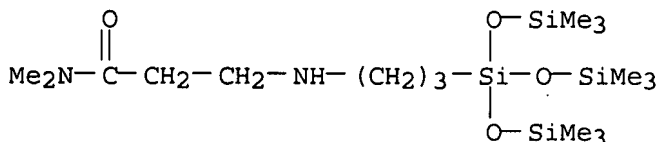
RN 212374-39-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-[[3-(dimethylamino)-3-oxopropyl][3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]-2-hydroxypropyl ester (9CI) (CA INDEX NAME)



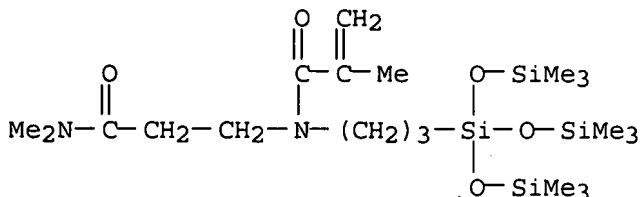
RN 212374-56-6 CAPLUS

CN Propanamide, N,N-dimethyl-3-[[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]amino]- (9CI) (CA INDEX NAME)



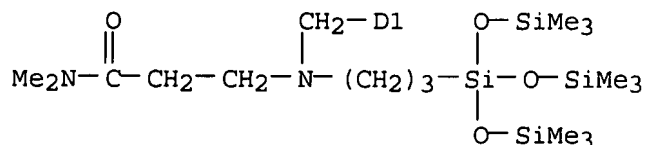
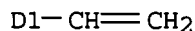
RN 212374-57-7 CAPLUS

CN 2-Propenamide, N-[3-(dimethylamino)-3-oxopropyl]-2-methyl-N-[3-[3,3,3-trimethyl-1,1-bis[(trimethylsilyl)oxy]disiloxanyl]propyl]- (9CI) (CA INDEX NAME)



RN 212613-42-8 CAPLUS

CN Propanamide, 3-[[[3-[1,1-bis[(trimethylsilyl)oxy]-3,3,3-trimethyldisiloxanyl]propyl][(ethenylphenyl)methyl]amino]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1991:30674 CAPLUS

DN 114:30674

TI Permeation controls through an adsorbed monolayer of alkylsilane amphiphiles immobilized on a porous glass plate

AU Ariga, Katsuhiko; Shimizu, Osamu; Ebara, Yasuhito; Okahata, Yoshio

CS Dep. Biomol. Eng., Tokyo Inst. Technol., Tokyo, 152, Japan

SO Nippon Kagaku Kaishi (1990), (10), 1136-42

CODEN: NKAJB8; ISSN: 0369-4577

DT Journal

LA Japanese

AB Monolayers of alkylsilane amphiphiles were immobilized in a porous glass plate (average pore diams. 50, 100, and 200 Å. Permeation rates of NaCl and water-soluble fluorescent probe across the porous glass plate occluded with the monolayer were reduced considerably compared with those across the original glass plate. The 100Å glass plate occluded with the monolayer reduced permeabilities effectively compared with other pore sizes in the glass plate. The permeation rate could be regulated by phase transitions from solid to liquid crystalline states of the immobilized monolayer

of dialkylsilane amphiphiles. The monoalkylsilane monolayers reduced the permeabilities only slightly and did not show the permeation change caused by the phase transition. The permeability was also influenced by the nature of the monolayer surface. The monolayer with the hydrophobic surface reduced the permeation rate of NaCl more than did those with hydrophilic surfaces. Permeation behaviors through the adsorbed monolayer were compared with those through Langmuir-Blodgett (LB) monolayers transferred onto a porous glass plate. The adsorbed monolayer reduced permeation effectively compared with the Langmuir-Blodgett (LB) monolayer on a porous glass plate. The LB monolayer was transferred only onto the outer surface of the glass plate, while the adsorbed monolayer could occlude both on the outer surface and inner core of the glass.

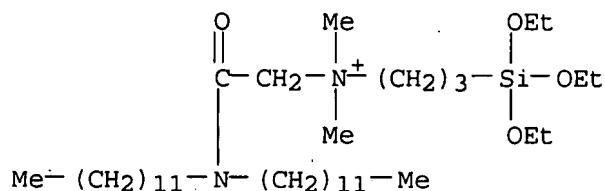
IT 102630-45-5

RL: PRP (Properties)

(chemisorbed, on porous glass plate for permeation control)

RN 102630-45-5 CAPLUS

CN 1-Propanaminium, N-[2-(didodecylamino)-2-oxoethyl]-N,N-dimethyl-3-(triethoxysilyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1986:449658 CAPLUS

DN 105:49658

TI Porous glass plate immobilized with the adsorbed monolayer of dialkylsilane amphiphiles. Permeation control by a phase transition of the adsorbed monolayer

AU Okahata, Yoshio; Ariga, Katsuhiko; Shimizu, Osamu

CS Dep. Polym. Chem., Tokyo Inst. Technol., Tokyo, 152, Japan

SO Langmuir (1986), 2(4), 538-40

CODEN: LANGD5; ISSN: 0743-7463

DT Journal

LA English

AB Adsorbed monolayers of dialkylsilane amphiphiles were immobilized in a porous glass plate (average pore diameter, 10 nm). The permeation rate of NaCl across the porous glass plate occluded with amphiphiles was less than that across the original porous glass plate. The rate could also be regulated by phase transitions from solid states to fluid liquid crystalline states of

the

immobilized monolayers in the pores, depending on the hydrophobic nature of the monolayer surface. The monoalkylsilane amphiphiles reduced the permeability only slightly and did not show the permeation change by the phase transition.

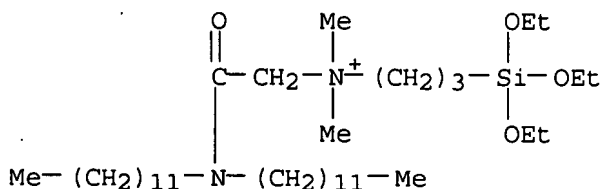
IT 102630-45-5

RL: PRP (Properties)

(adsorbed monolayer of, on porous glass plate, permeation control by)

RN 102630-45-5 CAPLUS

CN 1-Propanaminium, N-[2-(didodecylamino)-2-oxoethyl]-N,N-dimethyl-3-(triethoxysilyl)- (9CI) (CA INDEX NAME)



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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
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